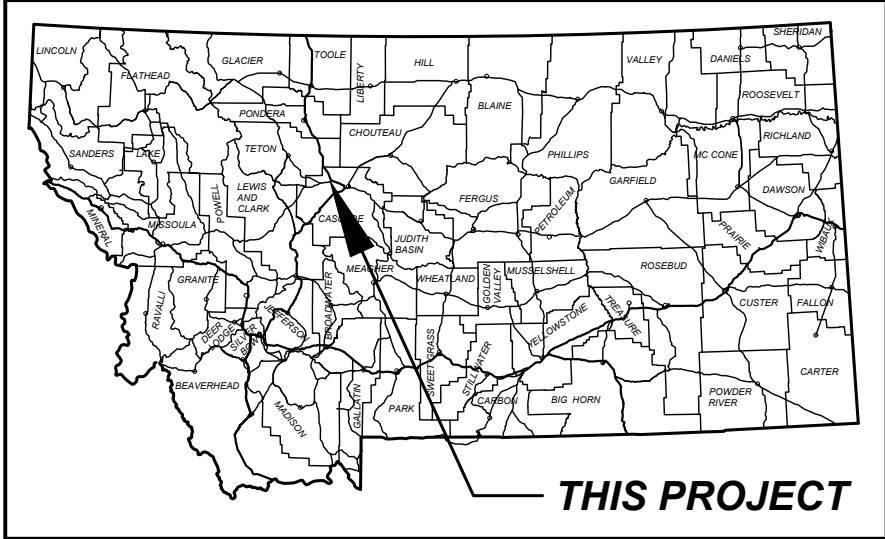




MONTANA DEPARTMENT OF TRANSPORTATION

FEDERAL AID PROJECT NH 3-1(61)0 CRACK SEAL, SEAL & COVER, AND BRIDGE DECK CRACK SEAL VAUGHN - WEST CASCADE COUNTY

PROJECT DESIGN DATA

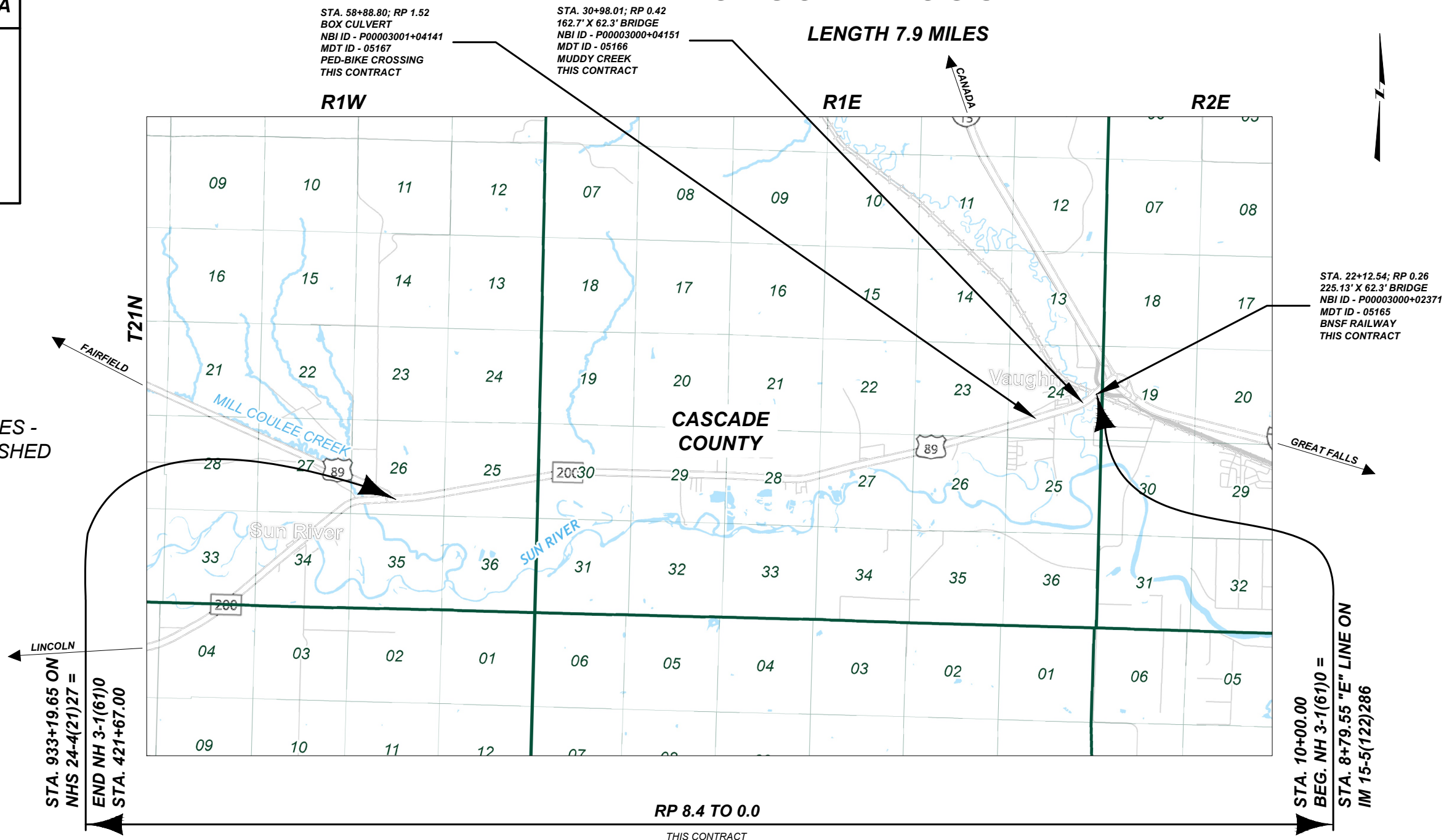
PRESENT	2025	A.D.T. = 4,820
LETTING	2026	A.D.T. = 4,870
DESIGN	2046	A.D.T. = 5,940
		D.H.V. = 580
		TRUCKS = 6.6%
		V. = 50 MPH
		18 KIP ESAL'S = 147 DAILY
		ANNUAL GROWTH RATE = 1.0%

RELATED PROJECTS

STPP 3-1(47)8
IM 15-5(158)291
IM 15-5(154)291
IM 15-5(157)278

SURFACING SOURCES -
CONTRACTOR FURNISHED

NOTE:
THE DISTANCE BETWEEN
RP 0.000 AND RP 1.000
IS 0.542 MILES.



SHEET NO.

01

TITLE SHEET

PROJECT NAME
VAUGHN - WEST

COUNTY
CASCADE

PROJECT ID
NH 3-1(61)0

UPN
10546000

DESIGNED BY
S. POWELL

REVIEWED BY
R. SNYDER

CHECKED BY
J. SOLIDAY

10546000RDTTL002.DWG

MONTANA
Department of Transportation

ROAD PLANS

5/26/2026 9:46 AM

TABLE OF CONTENTS

ROAD PLANS

TITLE SHEET	1
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BEGINNING OF PROJECT CONNECTION	8
BUS PULLOUTS	9-15

SHEET NO.

BASIS OF PLAN QUANTITIES

(QUANTITIES FOR ESTIMATING PURPOSES ONLY)	
BITUMINOUS MATERIAL	= 8.5 LBS. PER GAL.
CRACK SEALANT - EXISTING CRACKS	= 0.125 LBS. PER LNFT
CRACK SEALANT - NEW CRACKS	= 0.50 LBS. PER LNFT
SEAL	= 0.42 GAL. PER SQ.YARD
COVER	= 25 LBS. PER SQ.YARD

AS-BUILTS

NH-MT 3-1(34)0
NH 3-1(13)2 F
NH 3-1(12)0 F

PROJECT STATIONING

THE PROJECT WAS RESTATIONED FROM AS-BUILTS NH 3-1(12)0 F AND NH 3-1(13)2 F; ALL LOCATIONS ARE APPROXIMATE

NOTES

WETLANDS

WETLANDS MAY EXIST ADJACENT TO THE ROADWAY AND BEYOND THE PROJECT LIMITS. A WETLAND DELINEATION HAS NOT BEEN COMPLETED FOR THIS PROJECT. IMPACTS TO WETLAND AREAS ARE NOT ANTICIPATED IN ASSOCIATION WITH THE PROPOSED WORK. NO PERMITS HAVE BEEN OBTAINED. ANY ACTION IMPACTING WETLAND AREAS WITHOUT THE APPROPRIATE PERMITTING IS THE RESPONSIBILITY OF THE CONTRACTOR.

UTILITIES

CALL THE UTILITIES UNDERGROUND LOCATION CENTER (811) OR OTHER NOTIFICATION SYSTEM FOR THE MARKING AND LOCATION OF ALL LINES AND SERVICES BEFORE EXCAVATING. ALL CLEARANCES OR DEPTHS PROVIDED FOR UTILITIES ARE FROM EXISTING GROUND LINE.

SHEET NO.

02

TABLE OF CONTENTS & NOTES

 MONTANA Department of Transportation	DESIGNED BY		PROJECT NAME	
	S. POWELL	02/2026	VAUGHN - WEST	
	REVIEWED BY		COUNTY	CASCADE
	R. SNYDER	02/2026	PROJECT ID	
ROAD PLANS	CHECKED BY		NH 3-1(61)0	
	J. SOLIDAY	04/2026	UPN	
	10546000RDTTL002.DWG		10546000	
5/26/2026 9:46 AM				

MAINLINE

BE THEN TYP. NO. 2

3

OFFICIAL SECTIONS



square yards PER STATION
tons PER STATION
gals. PER STATION

MAINLINE

TRANS. TYP. NO. 2 TO TYP. NO. 3



AREA square feet
cubic yards PER STATION
tons PER STATION
square yards PER STATION

square yards PER STATION
tons PER STATION
gals. PER STATION

10546000

J. SOLIDAY	04/2026
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ROAD PLANS

4/15/2026 8:17 AM

MAINLINE

TO 409+82.05

4

TYPICAL SECTIONS



QUANTITIES			
UNIT	AGGREGATE	UNIT	BITUMINOUS MATERIAL
	COVER		SEAL
AREA square feet	867	square yards PER STATION	867
cubic yards PER STATION		tons PER STATION	1.55
tons PER STATION		gals. PER STATION	
square yards PER STATION			

MAINLINE

TO 418+77.10

COUNTRY

VAUGHN - WEST

CASCADE

NH 3-1(61)0

10546000



QUANTITIES			
UNIT	AGGREGATE	UNIT	BITUMINOUS MATERIAL
	COVER		SEAL
AREA square feet	733	square yards PER STATION	733
cubic yards PER STATION		tons PER STATION	1.31
tons PER STATION			
square yards PER STATION			

S. POWELL	02/2026
REVIEWED BY	

S. POWELL	02/2026
RECEIVED BY	

R. SNYDER	02/2026
-----------	---------

CHECKED BY	
J. SOLIDAY	04/2026

10546000RDTYP002.DWG



ROAD PLANS

4/15/2026 8:17 AM

MAINLINE

ONLY
TRANS. TYP. NO. 5 TO TYP. NO. 6

05

TYPICAL SECTIONS



QUANTITIES

MAINLINE

ONLY

VAUGHN - WEST

CASCADE

NH 3-1(61)0

10546000



QUANTITIES

MONTANA
Department of Transportation

ROAD PLANS

9/29/2026 8:55 AM

										SHEET NO.	
										06	
SURFACING											
STATION		linear feet				FOR	AGGREGATE	BITUMINOUS MATERIAL	REMARKS		
		GROSS	NET	+	-		sq. yards	tons			
							COVER TYPE II	EMULSIFIED ASPHALT SEAL CHFRS-2P			
FROM	TO										
10+00.00 BE	14+26.00	426.00	426.00				2,642	4.7	SEE DETAIL - AREA MEASURED ON CAD		
14+26.00	20+99.97 BE	673.97	673.97				4,643	8.3	TYP. NO. 1		
20+99.97 BE	23+25.10 BE	225.13			225.13	BRIDGE					
23+25.10 BE	30+16.64 BE	691.54	691.54				4,917	8.8	TYP. NO. 2		
30+16.64 BE	31+79.37 BE	162.73			162.73	BRIDGE					
31+79.37 BE	32+29.37	50.00	50.00				356	0.6	TYP. NO. 2		
32+29.37	34+01.61	172.24	172.24				1,359	2.4	TRANS. TYP. NO. 2 TO TYP. NO. 3		
34+01.61	401+55.28	36,753.67	36,753.67				318,654	569.7	TYP. NO. 3		
401+55.28	409+82.05	826.77	826.77				6,614	11.8	TRANS. TYP. NO. 3 TO TYP. NO. 4		
409+82.05	414+45.76	463.71	463.71				3,399	6.1	TYP. NO. 4		
414+45.76	418+77.10	431.34	431.34				2,827	5.0	TRANS. TYP. NO. 4 TO TYP. NO. 5		
418+77.10	421+67.00	289.90	289.90				1,676	3.0	TRANS. TYP. NO. 5 TO TYP. NO. 6		
						ADDITIONAL SURFACING	9,709	17.3	BUS PULLOUTS (14)		
TOTAL		41,167.00	40,779.14	~	387.86		356,795	637.8			
* ADDITIONAL SURFACING (INCLUDED IN SURFACING FRAME)											
STATION		linear feet				FOR	AGGREGATE	BITUMINOUS MATERIAL	REMARKS		
		GROSS	NET	+	-		sq. yards	tons			
							COVER TYPE II	EMULSIFIED ASPHALT SEAL CHFRS-2P			
FROM	TO										
75+81.55	79+12.56					BUS PULLOUT	572	1.0	LEFT		
83+16.78	87+19.84					BUS PULLOUT	719	1.3	RIGHT		
100+01.44	103+87.09					BUS PULLOUT	684	1.2	LEFT		
106+16.36	109+06.31					BUS PULLOUT	505	0.9	RIGHT		
154+95.93	159+48.40					BUS PULLOUT	735	1.3	RIGHT		
167+89.84	172+04.50					BUS PULLOUT	746	1.3	LEFT		
187+74.20	191+74.05					BUS PULLOUT	598	1.1	LEFT		
199+91.20	203+76.25					BUS PULLOUT	699	1.2	RIGHT		
204+76.63	207+40.61					BUS PULLOUT	509	0.9	LEFT		
217+06.87	220+96.22					BUS PULLOUT	860	1.5	LEFT		
228+40.96	230+92.16					BUS PULLOUT	457	0.8	RIGHT		
245+96.52	250+29.97					BUS PULLOUT	939	1.7	LEFT		
264+23.85	267+34.46					BUS PULLOUT	643	1.1	LEFT		
269+04.60	273+97.31					BUS PULLOUT	1,042	1.9	RIGHT		
SUBTOTAL		~	~	~	~		9,709	17.3			
* SEE DETAILS - AREAS MEASURED ON CAD											

SUMMARY FRAMES

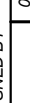
CRACK SEALING *						
STATION		TRANSVERSE & LONGITUDINAL CRACK SEALING				REMARKS
		CRACK SEALING				
		NEW	EXISTING	NEW	EXISTING	
FROM	TO	pounds	pounds	linear feet	linear feet	
10+00.00	421+67.00	40,995	180	81,990	1,440	ROADWAY AND BUS TURNOUTS
SUBTOTAL		40,995	180	#	#	
TOTAL		41,175		#	#	

FOR INFORMATION ONLY

BRIDGE QUANTITIES				
MDT STRUCTURE ID	NBI STRUCTURE ID	FEATURE CROSSED	sq. yards	REMARKS
			DECK CRACK SEAL	
05165	P00003000+02371	BNSF RAILWAY	1,663.7	
05166	P00003000+04151	MUDDY CREEK	1,200.0	
TOTAL			2863.7	

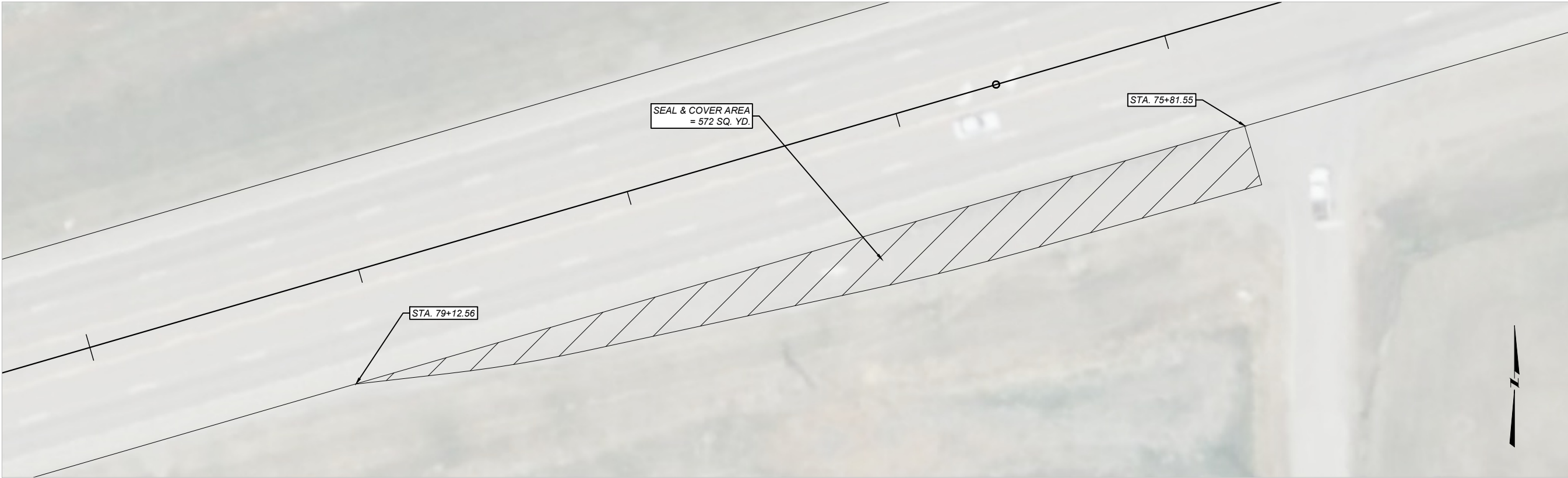
PAVEMENT MARKINGS				
ITEM	UNIT	INTERIM APPLICA- TION #	FINAL APPLICA- TION	TOTAL
STRIPING - WHITE PAINT	gallon	363		363
STRIPING - YELLOW PAINT	gallon	350		350
WORDS & SYMBOLS - WHITE PAINT	gallon	25		25
WORDS & SYMBOLS - YELLOW PAINT	gallon	17		17
STRIPING - WHITE EPOXY	gallon		484	484
STRIPING - YELLOW EPOXY	gallon		467	467
WORDS & SYMBOLS - WHITE EPOXY	gallon		32	32
WORDS & SYMBOLS - YELLOW EPOXY	gallon		22	22
FINAL SWEEP & BROOM	course mile			15.2

BASED ON 1 APPLICATION

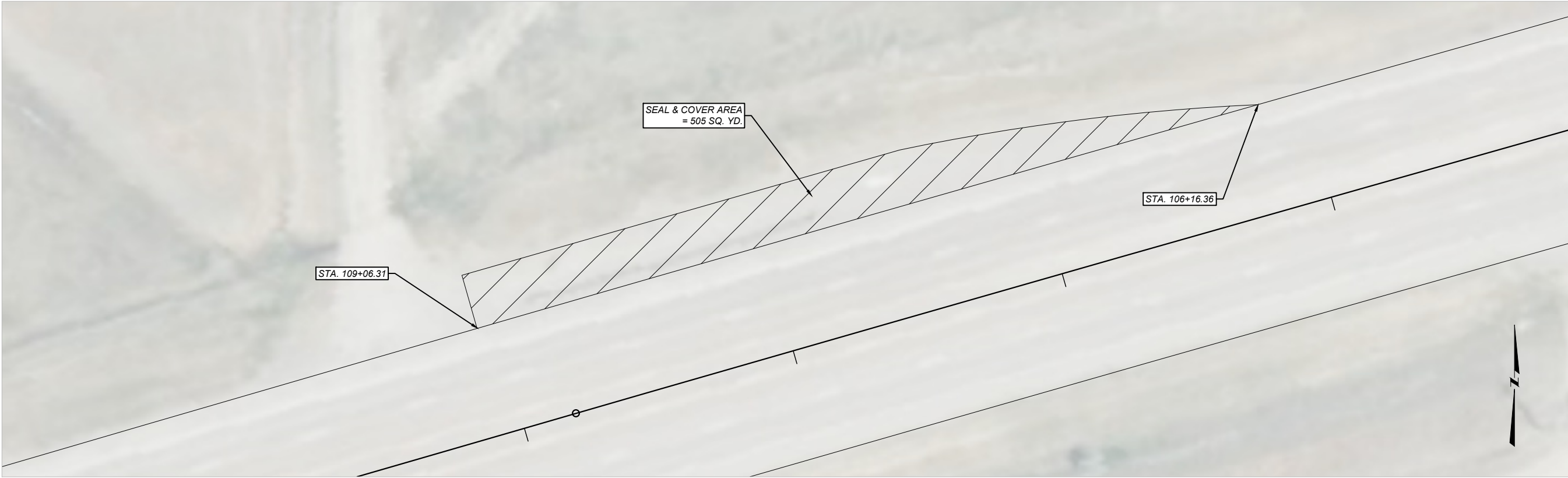
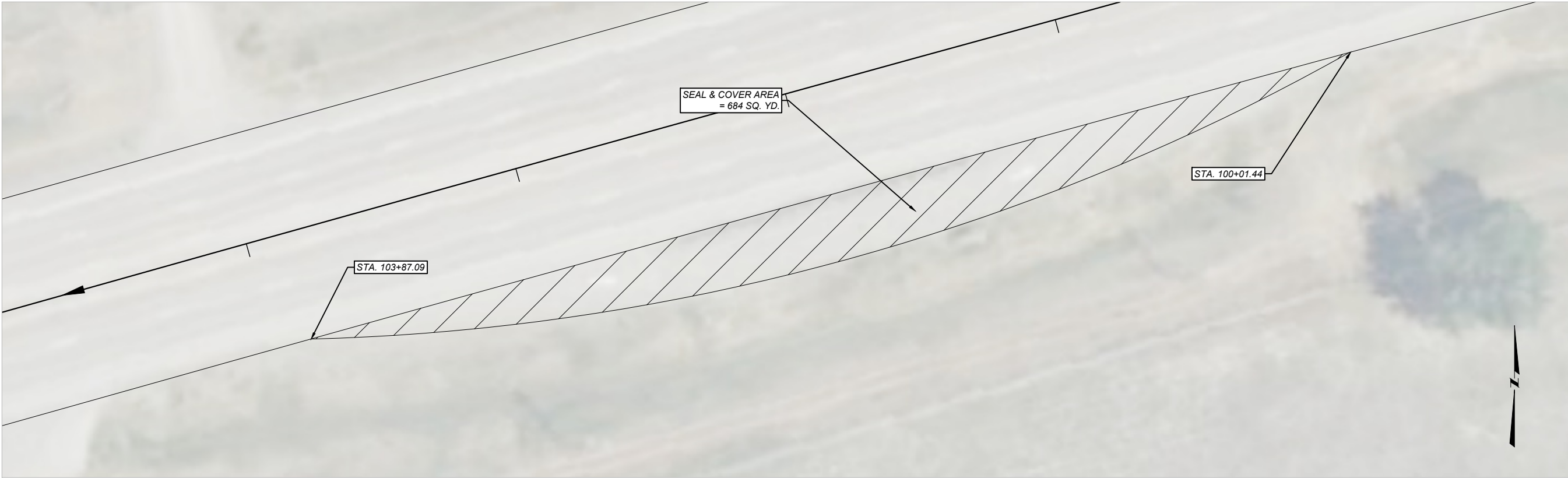
 MONTANA Department of Transportation	DESIGNED BY		S. POWELL	02/2026
	REVIEWED BY		R. SNYDER	02/2026
ROAD PLANS	CHECKED BY		J. SOLIDAY	04/2026
	9/29/2026 8:55 AM 10546000RDSUM002.DWG			



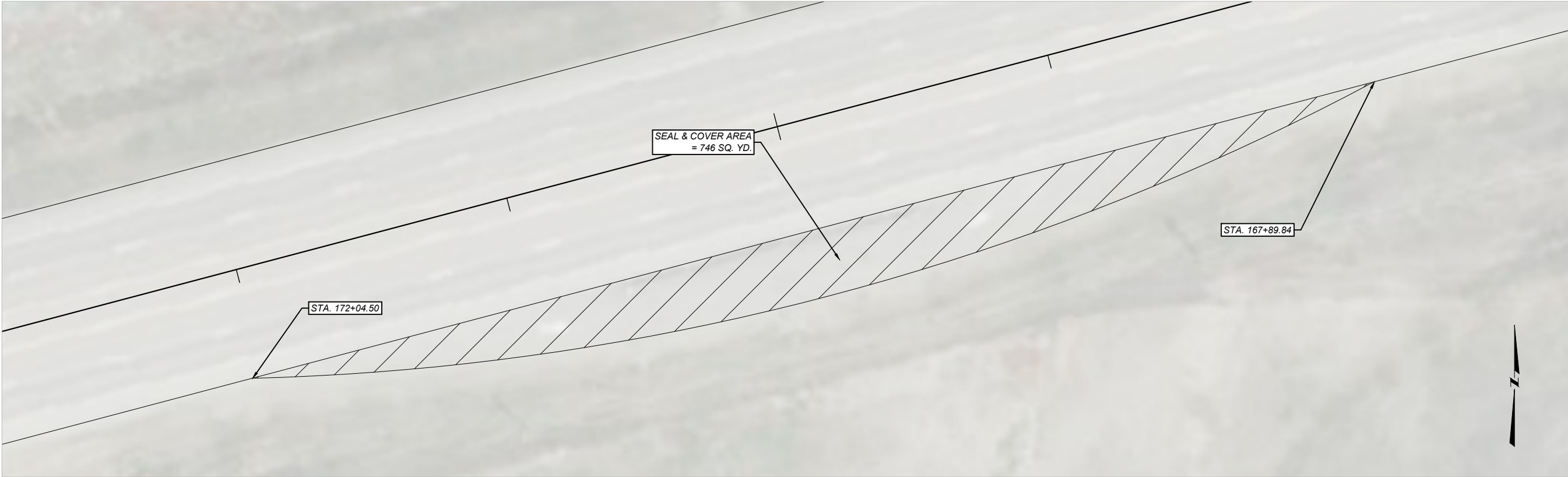
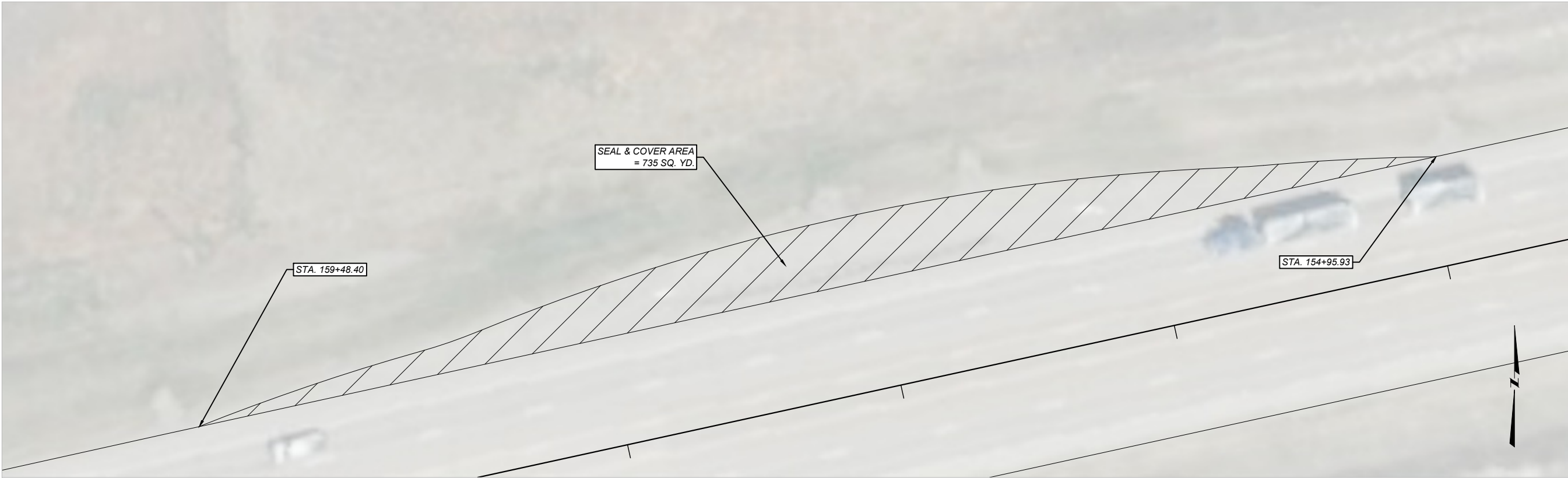
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			S. POWELL					
			REVIEWED BY		COUNTY			
			R. SNYDER		PROJECT ID			
			CHECKED BY		UPN			
J. SOLIDAY		10546000RDDET002.DWG		VAUGHN - WEST		CASCADE	NH 3-1(61)0	10546000



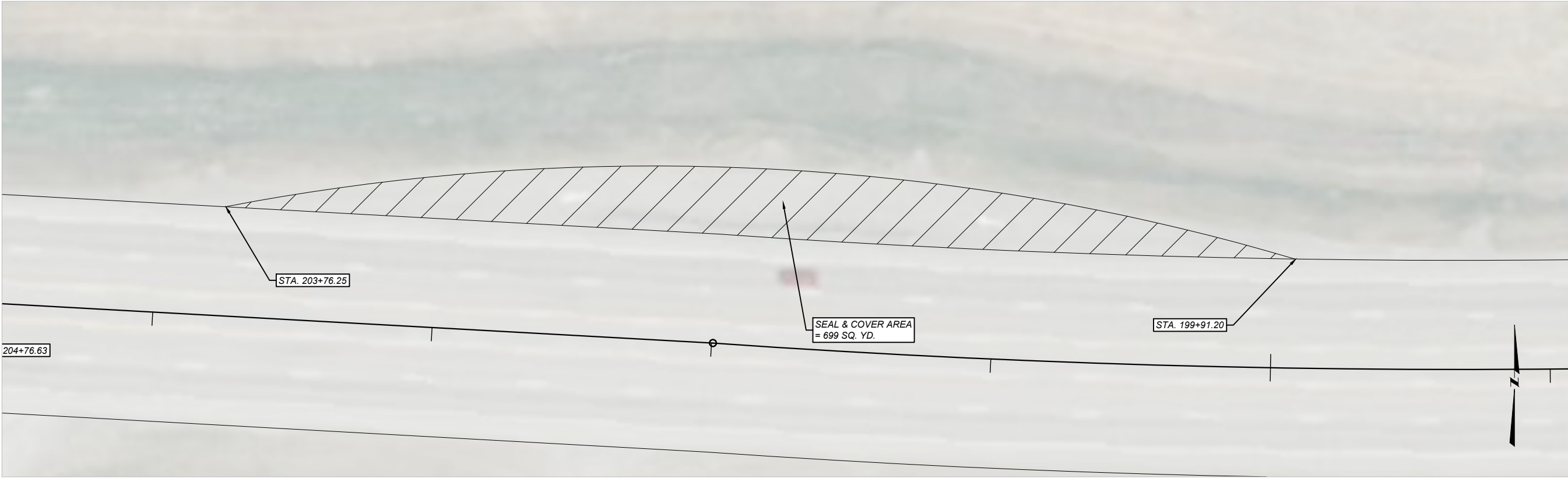
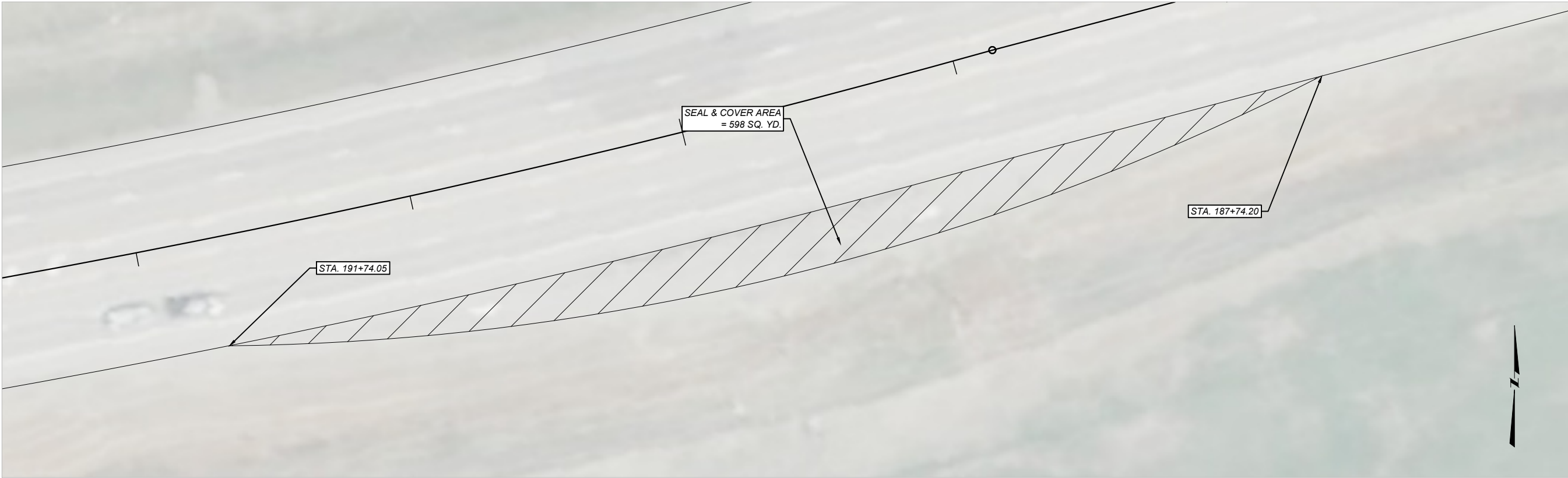
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BUS PULLOUTS DETAIL			
 MONTANA Department of Transportation	PROJECT NAME		VAUGHN - WEST
	COUNTY		CASCADE
	PROJECT ID		NH 3-1(61)0
	UPN		10546000
ROAD PLANS			
DESIGNED BY		S. POWELL	02/2026
REVIEWED BY		R. SNYDER	02/2026
CHECKED BY		J. SOLIDAY	04/2026
		10546000RDET002.DWG	
4/15/2026 8:21 AM			



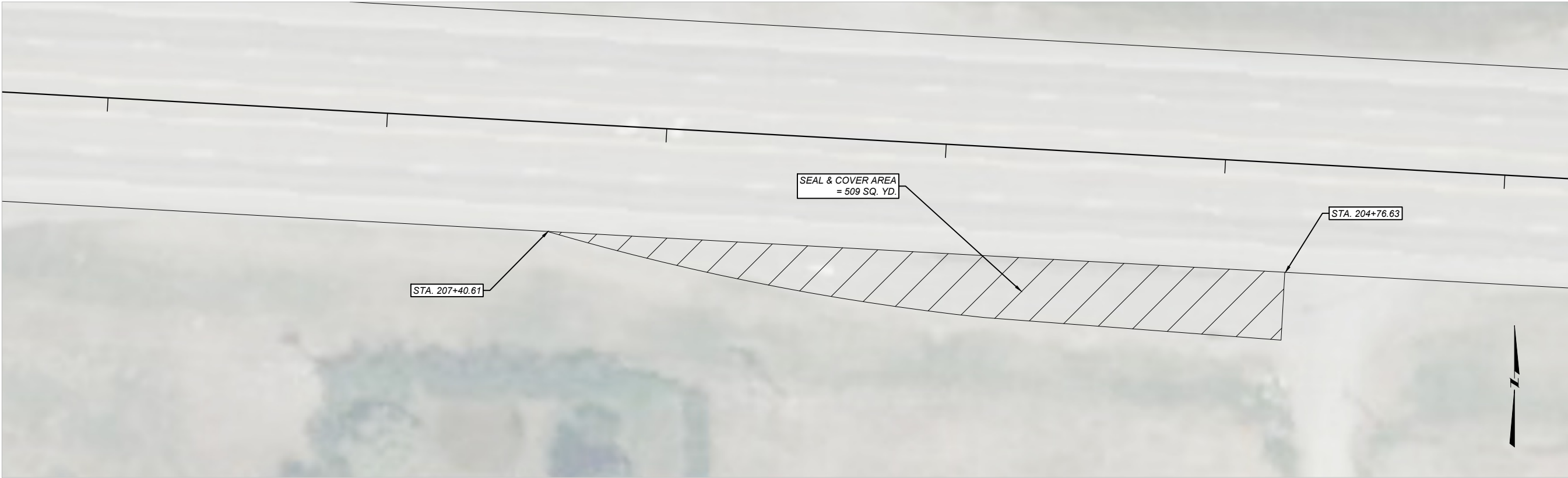
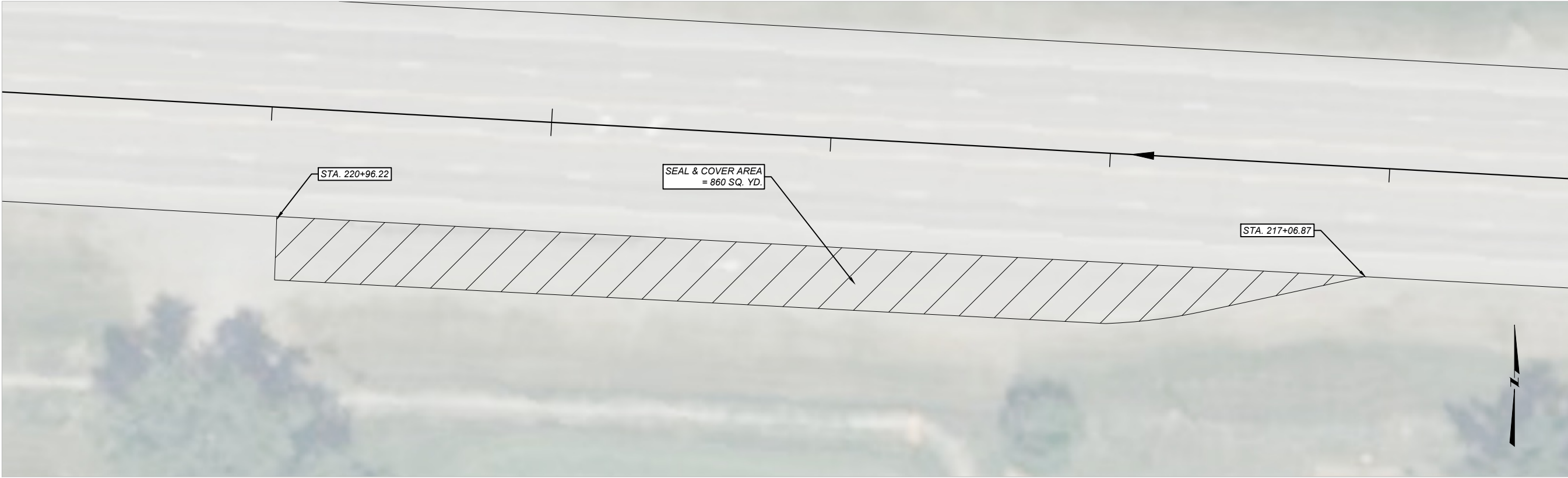
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		COUNTY	CASCADE
		PROJECT ID	NH 3-1(61)0
		UPN	10546000
		10546000RDET002.DWG	
		DESIGNED BY	02/2026
		REVIEWED BY	02/2026
		CHECKED BY	04/2026
		4/15/2026 8:21 AM	



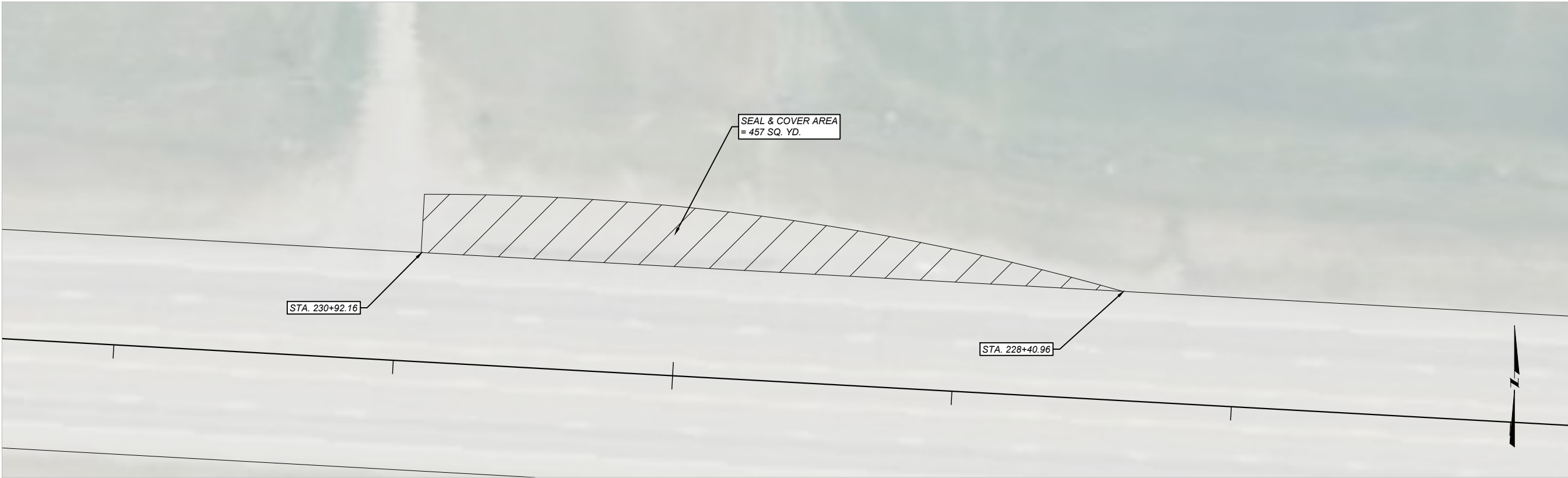
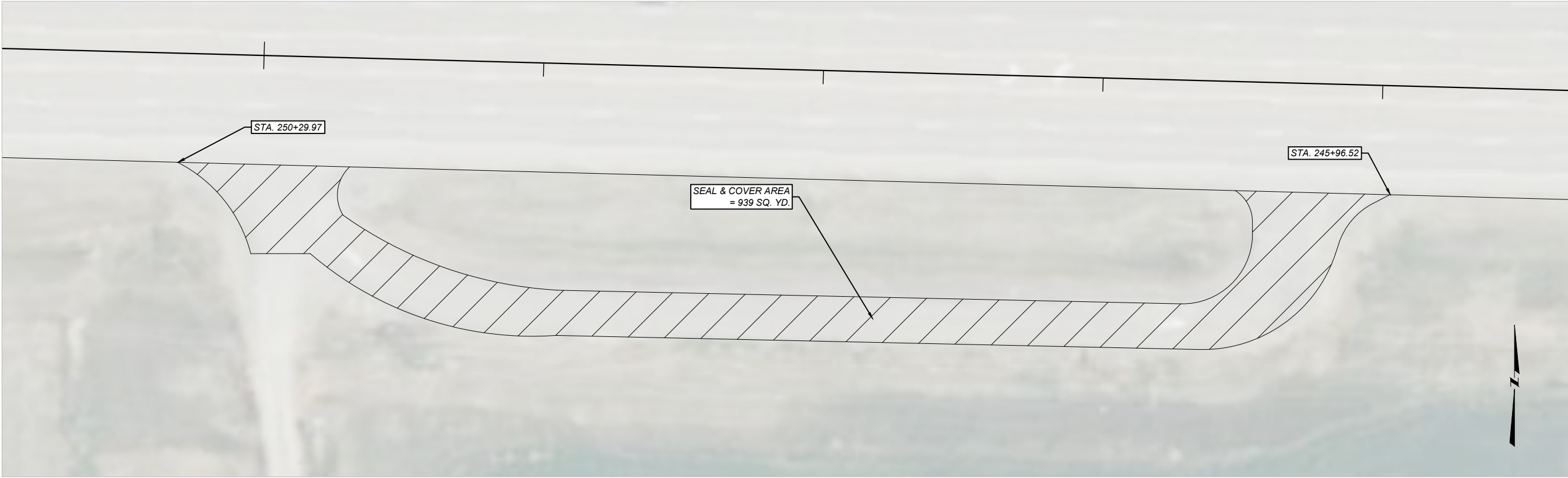
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		COUNTY	CASCADE
		PROJECT ID	NH 3-1(61)0
		UPN	10546000
		10546000RDET002.DWG	
		DESIGNED BY	S. POWELL
		REVIEWED BY	R. SNYDER
		CHECKED BY	J. SOLIDAY
		02/2026	
		04/2026	
		4/15/2026 8:21 AM	



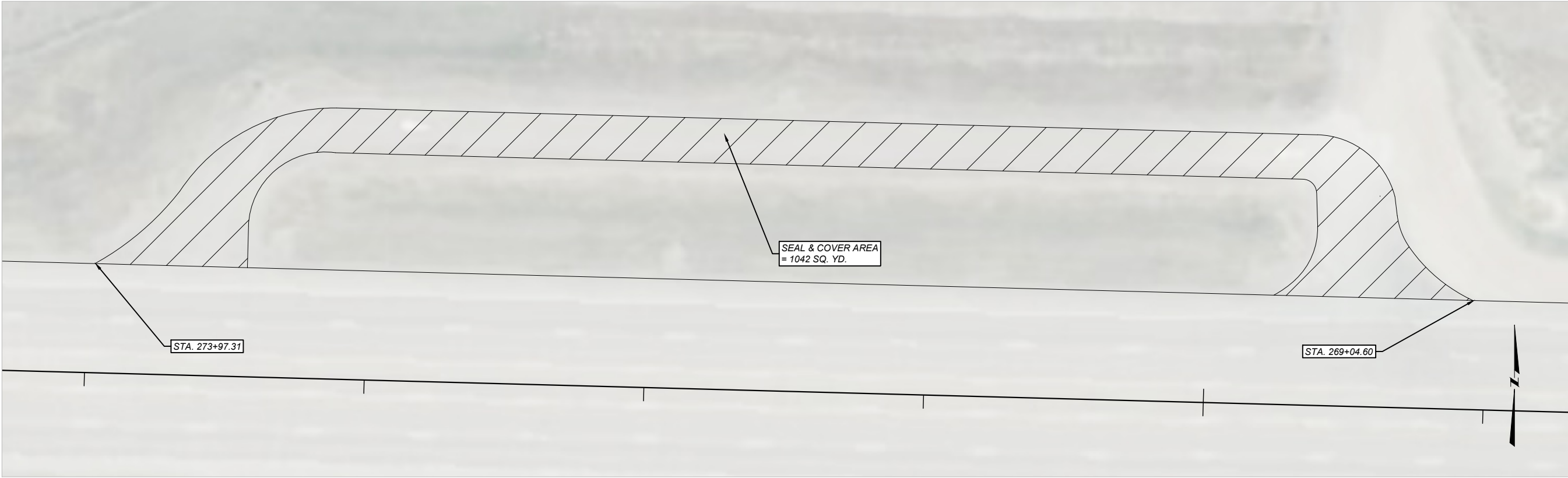
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		COUNTY				CASCADE
		PROJECT ID				NH 3-1(61)0
		UPN				10546000
DESIGNED BY		S. POWELL	02/2026			
REVIEWED BY		R. SNYDER	02/2026			
CHECKED BY		J. SOLIDAY	04/2026			
4/15/2026 8:21 AM		10546000RDET002.DWG				



 MONTANA Department of Transportation ROAD PLANS		DESIGNED BY		PROJECT NAME	
		S. POWELL		VAUGHN - WEST	
		REVIEWED BY		COUNTY	
		R. SNYDER		CASCADE	
		CHECKED BY		PROJECT ID	
		J. SOLIDAY		NH 3-1(61)0	
4/15/2026 8:21 AM		10546000RDET002.DWG		UPN	
				10546000	
BUS PULLOUTS DETAIL					
13					
SHEET NO.					



MONTANA Department of Transportation ROAD PLANS		DESIGNED BY		PROJECT NAME	
		S. POWELL	02/2026	VAUGHN - WEST	
		REVIEWED BY		COUNTY	CASCADE
		R. SNYDER	02/2026	PROJECT ID	
		J. SOLIDAY	04/2026	NH 3-1(61)0	
				UPN	10546000
4/15/2026 8:21 AM		10546000RDET002.DWG			



MONTANA Department of Transportation ROAD PLANS 4/15/2026 8:21 AM				DESIGNED BY		PROJECT NAME	
				S. POWELL		VAUGHN - WEST	
				REVIEWED BY		COUNTY	
				R. SNYDER		CASCADE	
				CHECKED BY		PROJECT ID	
				J. SOLIDAY		NH 3-1(61)0	
				UPN			
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SHEET NO.							
15							
BUS PULLOUTS DETAIL							